REMARKS

At the outset, Applicant notes with appreciation the Examiner's indication that claims 3, 4, 16 and 17 would be allowable if rewritten in independent form. It is respectfully requested that rewriting these claims in independent form be held in abeyance in view of the above amendments and the following remarks.

By way of the above amendments, claims 6, 11 and 19 have been amended and new claims 22-28 have been added. Accordingly, claims 1-28 are currently pending. Favorable reconsideration is respectfully requested.

On page 2 of the Office Action, the Examiner objected to the drawings because reference signs that were described in the specification are not shown in Figs. 17 and 18. In response, Applicants submit herewith an annotated drawing sheet showing proposed changes to Figs. 17 and 18. In Fig. 17, reference signs 1134g15-1334g18 have been added to the extension cable 32-1, and in Fig. 18, reference signs 1134g25-1334g28 have been added to the extension cable 32-2. These drawing changes are fully supported by the originally filed disclosure. For example, terminals 1134g15-1334g18 and 1134g25-1334g28 as presently shown in Figs. 17 and 18 are described as such on pages 27-28 of the specification. It is respectfully requested that the Examiner approve these proposed drawing changes. Formal versions of these changes to Figs. 17 and 18, and the correction of Fig. 22 (as required in the PTO-948) are attached hereto.

The Office Action also objected to the title of the invention for allegedly not being descriptive. Applicants have amended the title in accordance with the comments made in the Office Action. Applicants respectfully submit that this amendment fully addresses the concerns expressed on page 2 of the Office Action.

The Office Action includes a rejection of clams 1, 2 and 5 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Japanese Publication No. 10-079874 A to *Kido* in view of Japanese Publication No. 04-107438 to *Sato*. This rejection is respectfully traversed.

Claim 1 is directed to a digital camera that includes an image sensing unit and a camera body. The image sensing unit comprises a taking lens, and an image sensing device

for sensing a subject image formed by the taking lens and outputting the subject image as an electric signal. The camera body comprises an image processor for performing a predetermined processing on the electric signal from the image sensing unit, a detector for detecting a condition of connection of the image sensing unit to the camera body, and a power supply controller for controlling power supply in the camera body in accordance with a result of the detection.

In essence, the rejection asserts that the *Kido* publication discloses all the features recited in claim 1 except for a power supply controller for controlling power supply in a camera in accordance with a result of a detection of a condition of connection of the image sensing unit to the camera body. To account for this acknowledged shortcoming of *Kido*, the Office asserts that it would have been obvious to modify the camera of *Kido* with a teaching in the *Sato* publication of inhibiting charging of a built-in flash when an external flash is mounted to the camera. The Office Action alleges that the *Sato* publication teaches prohibiting power to a built-in flash of a camera when an external flash lamp is connected to the camera to eliminate unnecessary consumption of energy. It is respectfully submitted, however, that the proposed combination of *Kido* and *Sato* fails to teach the claimed detector for detecting a condition of connection of an image sensing unit together with the power supply controller in response to the detection result. For instance, *Sato's* external flash does not include a taking lens and an image sensing device as set forth in claim 1. The Office therefore has not established a *prima facie* case of obviousness because all the claimed features are not taught in the applied references. See, MPEP § 2143.03. For at least this reason, the rejection of claim 1 should be withdrawn.

Furthermore, Applicants respectfully submit that disclosure of inhibiting a simultaneous operation/charging of an internal and external flash in the *Sato* publication would not have suggestion to one of ordinary skill in the art the proposed modification of *Kido's* camera. First of all, attachment the image sensing unit of *Kido* is necessary whenever image taking is desired. That is, *Kido* does not have any "built-in" image sensing and lens function in addition to the external image sensing unit. Hence, the *Sato's* teaching of disabling one built-in flash element when an external flash does not appear to be

relevant to an image sensing unit that is connectable to a camera body. Second, while the *Sato* publication discloses a technique for disabling power to an existing flash in a camera body and providing power to an external flash device for maintaining a flash function when the external flash is connected, there is no disclosure in *Sato* of a detector for detecting any particular condition of this connection and a controller for controlling a supply of power in accordance with the result of this detected condition. To the contrary, the *Sato* publication appears to disclose detecting only whether the external flash is connected. Thus, while the *Sato* publication discloses a technique for disabling power to an existing flash in a camera body and providing power to an external flash device for maintaining a flash function when the external flash is connected, there is no disclosure in *Sato* of detecting any particular condition of this connection. By contrast, the camera of the present invention includes a controller for controlling power supply in the camera body according to a result of a condition of connection of the image sensing unit detected by a detector in the camera body.

Even if one were to consider, *arguendo*, combining *Sato* publication with the camera disclosed in the *Kido* patent, such hypothetical combination would perhaps have resulted in a camera having a detector for detecting connection of the image sensor, and a control means for detecting a connection of an external flash and disabling the charging/operation of the flash (i.e., flash 5, which appears "built-in" to the camera main body part 2. See, *Kido*, ¶ 0021 and Fig. 1). Such a combination would not have suggested "a detector for detecting a condition of connection of said image sensing unit to said camera body; and a power supply controller for controlling power supply in said camera body in accordance with a result of the detection," as recited in claim 1.

For the above reasons, the *Kido* and *Sato* documents, whether considered individually or in any combination, do not teach or suggest the combination of every feature recited in claim 1. Claims 2 and 5 depend from claim 1 and are therefor allowable at least for the above reasons, and further for the combinations including the additional features recited by these claims.

The Office Action also includes a rejection of claims 6-15 and 18-21 under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Kido* in view of U.S. Patent No. 6,130,717 to Arai et al. (hereinafter, "*Arai*"). Insofar as that the Office may consider this rejection to apply to claims 6, 11 and 19, as amended, this rejection is respectfully traversed.

Independent claim 6, as amended, recites that a digital camera to which an interface for performing connection to an external device is connectable comprises an image processor for performing a predetermined processing on image data from an image sensing unit having a taking lens and an image sensing device, a detector for recognizing an interface type from a condition of connection of the interface to the digital camera, and a power supply controller for controlling power supply in the digital camera in accordance with a result of the detection.

In rejecting claim 6, the Office assets that the *Kido* patent publication teaches a digital camera including a detector for detecting the connection of an image sensor, but that *Kido* does not teach the feature a power supply controller for controlling power supply in the camera in accordance with a result of the detection of a condition of connection of an interface to the camera. In connection with this subject matter, the Office alleges that the *Arai* patent discloses a switching circuit 38 that is activated to prohibit supply of power from the battery 37 to camera portions. However, amended claim 6 recites that a digital camera includes a detector for recognizing an interface type from a condition of connection of the interface to the digital camera. The significance of this detection is brought out in the next step recited in claim 6, namely "a power supply controller for controlling power supply in said digital camera in accordance with a result of the detection." Thus, the camera of the present invention includes a detector for recognizing a type of an interface from a condition of the connection of the interface to the camera, and a power supply controller that controls power supply in the camera in accordance with the type recognized by the detector. It is respectfully submitted that neither the *Kido* patent nor the *Arai* documents, whether taken alone or together in any combination, teach or suggest this combination of features.

The *Kido* publication discloses detecting whether a cable 32 is involved in a connection of an image pick-up part when it is connected to a camera main body. Depending on the detected condition (i.e., whether a cable is connected between the image pick-up part and the camera main body), a controller causes a delay between a first clock pulse generating means for driving an image pickup means and a second clock pulse for driving an analog-to-digital converter. While *Kido* discloses a detector for detecting a type of device upon its connection to a camera main body, there is no disclosure in *Kido* that a power supply controller for controlling power supply in accordance with a detected condition, as correctly acknowledged at page 4 of the Office Action.

The *Arai* patent is directed to an image pickup apparatus having a camera main body and a detachably mounted lens unit (LU). *Arai* describes a "detachable switch 35" that detects when a LU is detached from, or is incorrectly installed on a camera. According to *Arai*, when the detachable switch 35 detects an attached/detached or incorrectly attached condition of the lens unit, a switching circuit 38 is activated by a microcomputer 36 to prohibit supply of power supply voltages from a battery 37 to portions of the camera. (See, *Arai*, column 2, line 25 to column 3, line 60; column 8, line 41 to column 9, line 2, and lines 30-38; and column 21, lines 34-36.) However, in the camera disclosed in the *Arai* patent, regardless of how many lens units are associated with the camera, the detachable switch 35 detects only a state of attachment or detachment of these lens units. In other words, the switch 35 does not recognize when <u>different</u> types of devices connected to the camera. A significant distinction of the present invention is that a detector is configured to recognize a type of interface connected to a camera, <u>and</u> that a power supply controller is configured to control power supply based on this recognition.

Hence, neither *Kido* nor *Arai* disclose the combination of the detector and power supply controller as claimed. Furthermore, even if one were to consider the proposed combination of these documents, there is no existing nexus between the concept of a clock delay in *Kido* with the concept of controlling power supply with a detachable switch as disclosed in *Arai*. Because the applied documents do not teach or suggest any combination

of these concepts, it is respectfully submitted that the a *prima facie* case does not exist. Accordingly, amended claim 6, and hence its dependent claims, are believed patentable.

These same distinctions apply to claims 11 and 19, as well as their dependent claims. For instance, claim 11 recites, *inter alia*, a detector for detecting a condition of connection of an external device when connected to said connection device and for identifying the external device, and a power supply controller for controlling power supply to said digital camera in accordance with a result of the detection. Claim 19 is directed to a method that includes, *inter alia*, the steps of detecting a condition of connection of a detachable device to said digital camera, wherein detecting a condition comprises identifying the type of device connected to the camera, and controlling power supply in said digital camera in accordance with a result of the detection. For reasons pointed out above for claim 6, it is respectfully submitted that no combination of *Kido* and *Arai* documents discloses these features.

From the foregoing, it is respectfully submitted that the rejections of the claims should be withdrawn. Further and favorable action in the form of a Notice of Allowance is earnestly solicited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: September 22, 2003

By: _____
John F. Guay
Registration No. 47,248

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

FIG. 16

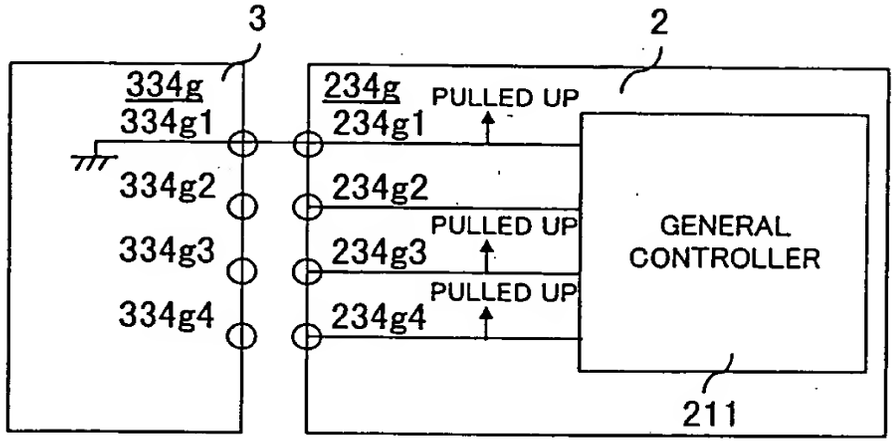

FIG. 17

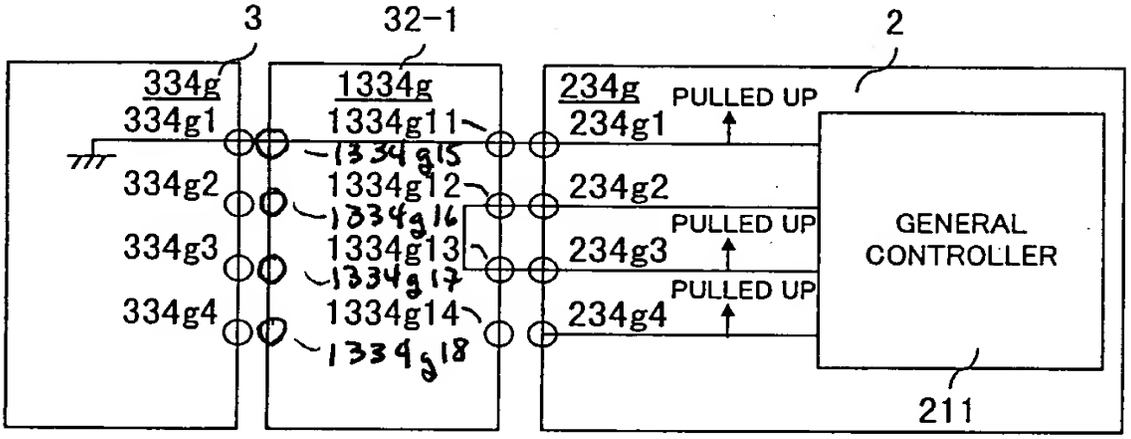

FIG. 18